



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 136947

TO: Ruixiang Li
Location: rem/4d75/4c70
Art Unit: 1646
Tuesday, November 02, 2004

Case Serial Number: 10/763854

From: Edward Hart
Location: Biotech-Chem Library
REM-1A55
Phone: 571-272-2512
edward.hart@uspto.gov

1 of 62 1,728

Search Notes

Examiner Li,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

Edward Hart

Db	1	MNEPLDYANASDPEYDAAFGNCIDENTPLKMHLPVYGIIFLVGPGRAVVSTYIF	60
Qy	6.1	KQRPKWSSSTMNLAFTDLYLTSLPFLIHYAAGENNTFGDFCKPFRFSFHNLSS	120
Db	6.1	KQRPKWSSSTMNLAFTDLYLTSLPFLIHYAAGENNTFGDFCKPFRFSFHNLSS	120
Qy	12.1	ILFLTCFSIIFYCVIIPHMSCSFIHKTRCAVVAZGVWIIISLVAYIPMTPLITSTNRNR	180
Db	12.1	ILFLTCFSIIFYCVIIPHMSCSFIHKTRCAVVAZGVWIIISLVAYIPMTPLITSTNRNR	180
Qy	18.1	SACDLTSDESNTKWNLLTATTFCPLPLVTVLCYTTLIHTLHGLOTDSCLKQKAR	240
Db	18.1	SACDLTSDESNTKWNLLTATTFCPLPLVTVLCYTTLIHTLHGLOTDSCLKQKAR	240
Qy	24.1	RLTILLLLAFYVCPFLPHDRVRIESRLSISCIENQHEAVYVSRLAALNTFGNLL	300
Db	24.1	RLTILLLLAFYVCPFLPHDRVRIESRLSISCIENQHEAVYVSRLAALNTFGNLL	300
Qy	30.1	IYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP	337
Db	30.1	IYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP	337

RESULT 6	
AAO14027	AAO14027 standard; protein; 337 AA.
ID	AAO14027
XX	
AC	AAO14027;
XX	
DT	3-0-APP-2002 (first entry)
XX	
DE	Human purinergic-related G-protein coupled receptor (GPCR).
XX	
KW	Human; chromosome 13; purinergic GPCR; G-protein coupled receptor;
XX	signal transduction; human protease; GPCR disorder; gene receptor;
KW	transgenic animal; receptor.
XX	
OS	Homo sapiens.
XX	

XX 22-NOV-2001.
XX PD
XX 17-MAY-2001; 2001WO-US015957.
XX PP
XX 18-MAY-2000; 2000US-0205196P.
XX PR
XX 08-AUG-2000; 2000US-00634656.
XX PA (APPLA-) APPLERA CORP.
XX

XX WPI; 2002-075312/10.
 DR N-PSDp; AAK98323, AAK98324.

XX XX Novel isolated G-protein coupled receptor peptide useful for treating
 PT disorder characterized by absence of, in appropriate or unwanted
 PT expression of the receptor protein, and as immunogens to raise
 PT antibodies.

XX PS Claim 1: Fig 2; 64pp; English.

XX CC The present specifically claimed sequence represents a human purinergic-
 CC related G-protein coupled receptor (GPCR) encoded by a gene on chromosome
 CC 13. GPCRs constitute a major class of proteins responsible for signal
 CC transmission within a cell. Upon binding of a ligand to the extracellular
 CC portion of a GPCR, a signal is transduced resulting in a biological or
 CC physiological change within the cell. The GPCR proteins can be divided
 CC into five families, family I contains the purinergic GPCRs (e.g., the P2Y
 CC receptors). P2X receptors are characterised by their selective
 CC responsiveness towards ATP and its analogues, some also respond to UTP.
 CC The invention comprises a human G-protein coupled receptor protein and

CC encoding nucleic acids. The GPCR protein and nucleic acids of the
 CC invention are useful in the treatment of a disease or condition mediated
 CC by a human protease. The GPCR protein of the invention is useful for: the
 CC development/identification of therapeutic proteins; assays designed to
 CC quantitatively determine levels of the protein in biological fluids;
 CC identifying compounds which modulate the activity of the GPCR, or the
 CC interaction of the GPCR and a molecule with which it normally interacts;
 CC and treating a disorder characterised by an absence of, or inappropriate
 CC expression of the GPCR protein. The GPCR nucleic acids of the invention
 CC are useful in diagnostic assays to identify changes in the GPCR nucleic
 CC acid that lead to Pathology; controlling GPCR expression; and in gene
 CC therapy to treat conditions with aberrant GPCR expression. The GPCR
 CC nucleic acids can also be used in the production of transgenic animals
 CC XX SQ

Query	Match	Score	Length
Qy	Best Local Similarity	100.0%	DB 5; Length 337;
Db	Matches	100.0%;	Pred. No. 1.1-194;
Qy	Conservative	0;	Mismatches 0;
Db		0;	Indels 0;
Qy	1 MNEDLDYLANASFPDYAAFGNCNTDNDIPLKMHLPVIGTIFLVLGFPGNAAVVIVSTYIF	60	
Db	1 MNEDLDYLANASFPDYAAFGNCNTDNDIPLKMHLPVIGTIFLVLGFPGNAAVVIVSTYIF	60	
Qy	61 KMRPKWKSSTIMMLNACTDLILYLTSPLPFLIHYAAGENWIRGDFFMCKFIRFSFHFLYSS	120	
Db	61 KMRPKWKSSTIMMLNACTDLILYLTSPLPFLIHYAAGENWIRGDFFMCKFIRFSFHFLYSS	120	
Qy	121 ILFTCFSFISRYCVTIIHMSCSFSIHKTRCAVACAYWIIISLVAVIPMTLELTISRTNR	180	
Db	121 ILFTCFSFISRYCVTIIHMSCSFSIHKTRCAVACAYWIIISLVAVIPMTLELTISRTNR	180	
Qy	181 SACIDLTSDEINTKWNLLTTFCPLPVITVTCYTIIHLTHGLQDSCFLQKAR	240	
Db	181 SACIDLTSDEINTKWNLLTTFCPLPVITVTCYTIIHLTHGLQDSCFLQKAR	240	
Qy	241 RLTLILLLAFTYCYCFLPFHILRVTRIESRLLSITCSIENOTHEAYVSRLAALNTFGNLL	300	
Db	241 RLTLILLLAFTYCYCFLPFHILRVTRIESRLLSITCSIENOTHEAYVSRLAALNTFGNLL	300	
Qy	301 LYVYTSDFNFOQAVCSITYRKCGNLBEAKKCSYSNNP	337	
Db	301 LYVYTSDFNFOQAVCSITYRKCGNLBEAKKCSYSNNP	337	

XX PR 14-AUG-2000; 2000US-0224989P.
 XX (FARB) BAYER AG.
 PI Ramakrishnan S;
 XX DR WPI; 2002-257607/30.
 DR N-PSDB; ABKL1381.
 XX Novel human P2Y1-like G protein-coupled receptor polypeptide which can be
 PT regulated for treating infection, pain, cancer, diabetes, anorexia,
 PT asthma, hypertension, neurological disorder and dyskinesia.
 XX
 PS Claim 25; Fig 2; 118pp; English.
 XX CC The invention relates to a purified human P2Y1-like G protein-coupled
 CC receptor (GPCR) polypeptide and the nucleic acids encoding it (including
 CC 5' and 3' sequences, promoters, fragments, variants, or a sequence
 CC encoding a protein at least 50% identical to the GPCR). Also included are
 CC an expression vector comprising the nucleic acid, a host cell containing
 CC the vector and the identification of modulators of the GPCR especially
 CC those that reduce the activity of the GPCR. The nucleic acid is useful
 CC for detecting a polynucleotide encoding the GPCR in a biological sample.
 CC The GPCR and nucleic acid is useful for screening for agents which
 CC decrease the activity of the GPCR and for modulators of the GPCR. The
 CC modulator or agent useful for modulating the activity of P2Y1-like G
 CC protein-coupled receptor in a disease such as bacterial, fungal,
 CC protozoan, and viral infection, pain, cancer, anorexia, bulimia, asthma,
 CC central nervous system (CNS) disease, acute heart failure, hypertension,
 CC hypertension, urinary retention, osteoporosis, diabetes, angina Pectoris,
 CC myocardial infarction, ulcer, inflammation, allergy, multiple sclerosis,
 CC benign prostatic hypertrophy, psoriasis, HIV virus infection (human immunodeficiency virus),
 CC CNS dyskinesias, CNS disorders such as Parkinson's disease, anxiety, schizophrenia, manic
 CC depression, delirium, dementia, severe mental retardation, Huntington's
 CC disease and Tourette's syndrome. The present sequence represents the P2Y1
 -like GPCR of the invention.
 XX SQ Sequence 337 AA;

Query Match 100.0%; Score 1771; DB 5; Length 337;
 Best Local Similarity 100.0%; Pred. No. 1.1e-194;
 Matches 337; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MNEPLDYLANASDFPDYAAFGNCIDENIPKMHYLPLVYGLIIFVGFPGNAVVIVSTYIF 60
 Db 1 MNEPLDYLANASDFPDYAAFGNCIDENIPKMHYLPLVYGLIIFVGFPGNAVVIVSTYIF 60
 Qy 61 KMRPKWSSTIMLNACTDLYLTSPLFLIHYASGENWIFGDEMCKFIRFSFHNPFLYSS 120
 Db 61 KMRPKWSSTIMLNACTDLYLTSPLFLIHYASGENWIFGDEMCKFIRFSFHNPFLYSS 120
 Qy 121 JLFLLTCSIFRYCVIHPMSFSIHKTRCAVACAVWVILSLVAVIPMFLITSTNRNR 180
 Db 121 JLFLLTCSIFRYCVIHPMSFSIHKTRCAVACAVWVILSLVAVIPMFLITSTNRNR 180
 Qy 181 SACDLTSSDEINTIKYNNLILATFCLPLVIVLCLTYTTIHLTHGLODSCLKQRAR 240
 Db 181 SACDLTSSDEINTIKYNNLILATFCLPLVIVLCLTYTTIHLTHGLODSCLKQRAR 240
 Qy 241 RLTILLIAFYCFLPFHILVRITRSRLSISCSENQIHEAYIVSRPLAALNTFGNL 300
 Db 241 RLTILLIAFYCFLPFHILVRITRSRLSISCSENQIHEAYIVSRPLAALNTFGNL 300
 Qy 301 IXYVVSNDNFOQAVCSTYRKYSGNLQAKKISYSNNP 337
 Db 301 IXYVVSNDNFOQAVCSTYRKYSGNLQAKKISYSNNP 337

RESULT 8
 AEE21803 standard; protein: 337 AA.
 ID AEE21803

XX AC AAE21803;
 XX DT 16-JUL-2002 (First entry)
 DE Human AXOR89 (G-protein coupled receptor) protein.
 XX Human; AXOR89 polypeptide; G-protein coupled receptor; vaccine; receptor;
 XX infection; cancer; pain; asthma; Parkinson's Disease; diabetes; obesity;
 XX anorexia; bulimia; heart failure; hypertension; hypertension; ulcer;
 XX stroke; urinary retention; osteoporosis; angina pectoris; schizophrenia;
 XX myocardial infarction; allergy; benign prostatic hypertrophy; migraine;
 XX vomiting; psychotic; neurological disorder; anxiety; manic depression;
 XX delirium; Huntington's Disease; Gilles de la Tourette's syndrome;
 XX dementia; dyskinesia.
 XX OS Homo sapiens.
 XX PN GB23650122.
 XX PD 13-FEB-2002.
 XX PP 10-MAY-2001; 2001GB-00011437.
 XX PR 11-MAY-2000; 2000US-00563137.
 XX PA (SMIKLINE BEECHAM CORP.
 PA (SMIKLINE BEECHAM PLC.
 XX PI Elshourbagy N; Shabot U;
 XX WPI; 2002-332558/37.
 DR N-PSDB; AAB34278.
 XX PR Novel AXOR89 polypeptide and polynucleotide encoding it, useful for
 PT identifying agonists and antagonists in the treatment of diseases
 PR associated with an AXOR89 imbalance, such as cancers, diabetes or asthma.
 PR
 PS Claim 1; Page 30; 37PP; English.

XX The invention relates to an isolated AXOR89 polypeptide (G-protein
 CC coupled receptor) and its polynucleotide. The novel AXOR89 polypeptide
 CC and polynucleotide encoding the polypeptide, is useful for identifying
 CC agonists and antagonists (or inhibitors) that are potentially useful in
 CC treating conditions associated with an AXOR89 imbalance, such as
 CC bacterial, fungal or protozoan infections, cancers, pain, asthma,
 CC Parkinson's Disease, diabetes, obesity, bulimia, acute heart
 CC failure, hypertension, hyperthyroidism, urinary retention, ostcoporosis,
 CC angina pectoris, myocardial infarction, stroke, ulcers, allergies, benign
 CC prostatic hypertrophy, migraine, vomiting, psychiatric and neurological
 CC disorders, anxiety, schizophrenia, manic depression, delirium, dementia,
 CC dyskinesias, such as Huntington's Disease or Gilles de la Tourette's
 CC syndrome. The polynucleotide sequence may also be used for chromosome
 CC localisation of tissue expression studies. The AXOR89 is used as a
 CC vaccine or to produce fusion proteins. The present sequence is human
 CC AXOR89 protein.
 XX Sequence 337 AA;

XX Query Match 100.0%; Score 1771; DB 5; Length 337;
 Best Local Similarity 100.0%; Pred. No. 1.1e-194;
 Matches 337; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MNEPLDYLANASDFPDYAAFGNCIDENIPKMHYLPLVYGLIIFVGFPGNAVVIVSTYIF 60
 Db 1 MNEPLDYLANASDFPDYAAFGNCIDENIPKMHYLPLVYGLIIFVGFPGNAVVIVSTYIF 60
 Qy 61 KMRPKWSSTIMLNACTDLYLTSPLFLIHYASGENWIFGDEMCKFIRFSFHNPFLYSS 120
 Db 61 KMRPKWSSTIMLNACTDLYLTSPLFLIHYASGENWIFGDEMCKFIRFSFHNPFLYSS 120
 Qy 121 JLFLLTCSIFRYCVIHPMSFSIHKTRCAVACAVWVILSLVAVIPMFLITSTNRNR 180
 Db 121 JLFLLTCSIFRYCVIHPMSFSIHKTRCAVACAVWVILSLVAVIPMFLITSTNRNR 180
 Qy 181 SACDLTSSDEINTIKYNNLILATFCLPLVIVLCLTYTTIHLTHGLODSCLKQRAR 240
 Db 181 SACDLTSSDEINTIKYNNLILATFCLPLVIVLCLTYTTIHLTHGLODSCLKQRAR 240
 Qy 241 RLTILLIAFYCFLPFHILVRITRSRLSISCSENQIHEAYIVSRPLAALNTFGNL 300
 Db 241 RLTILLIAFYCFLPFHILVRITRSRLSISCSENQIHEAYIVSRPLAALNTFGNL 300
 Qy 301 IXYVVSNDNFOQAVCSTYRKYSGNLQAKKISYSNNP 337
 Db 301 IXYVVSNDNFOQAVCSTYRKYSGNLQAKKISYSNNP 337

Qy 1 MNEPFLDYLANASDFPDYAAFGNCIDENIPKMHYLPLVYGLIIFVGFPGNAVVIVSTYIF 60
 Db 1 MNEPFLDYLANASDFPDYAAFGNCIDENIPKMHYLPLVYGLIIFVGFPGNAVVIVSTYIF 60
 Qy 61 KMRPKWSSTIMLNACTDLYLTSPLFLIHYASGENWIFGDEMCKFIRFSFHNPFLYSS 120
 Db 61 KMRPKWSSTIMLNACTDLYLTSPLFLIHYASGENWIFGDEMCKFIRFSFHNPFLYSS 120
 Qy 121 JLFLLTCSIFRYCVIHPMSFSIHKTRCAVACAVWVILSLVAVIPMFLITSTNRNR 180
 Db 121 JLFLLTCSIFRYCVIHPMSFSIHKTRCAVACAVWVILSLVAVIPMFLITSTNRNR 180
 Qy 181 SACDLTSSDEINTIKYNNLILATFCLPLVIVLCLTYTTIHLTHGLODSCLKQRAR 240
 Db 181 SACDLTSSDEINTIKYNNLILATFCLPLVIVLCLTYTTIHLTHGLODSCLKQRAR 240
 Qy 241 RLTILLIAFYCFLPFHILVRITRSRLSISCSENQIHEAYIVSRPLAALNTFGNL 300
 Db 241 RLTILLIAFYCFLPFHILVRITRSRLSISCSENQIHEAYIVSRPLAALNTFGNL 300
 Qy 301 IXYVVSNDNFOQAVCSTYRKYSGNLQAKKISYSNNP 337
 Db 301 IXYVVSNDNFOQAVCSTYRKYSGNLQAKKISYSNNP 337

An isolated P2Y-like receptor polypeptide (HIFHUM 0000037) which can be used for the identification of agonists and antagonists which may be used to treat an immune or inflammatory disease.

Claim 5: Page 28-29; 35pp; English.

The invention relates to an isolated P2Y-like receptor polypeptide (ABB83818-ABB83819) which is also referred to in the specification as HIFHUM 0000037. An effective amount of a substance (agonist or antagonist) which modulates P2Y receptor activity is useful to treat a subject having a disorder that is responsive to P2Y-like receptor modulation. The disorder is a disease of immunity or inflammation. The substance may also be used to manufacture a medicine for the treatment or prophylaxis of a disorder that is responsive to stimulation or modulation of P2Y-like receptor activity. Disorders which may be treated include colon cancer, asthma, COPD, Crohn's disease, irritable bowel syndrome, gastroenteritis and colitis, inflammatory bowel syndrome, ulcerative colitis, rheumatoid arthritis, viral diseases, bacterial infections, autoimmune diseases, dermatitis, glomerulonephritis allergies, allergic rhinitis, inflammatory pain and General inflammation such as tendonitis, polymyositis or prostatitis. The invention provides alternative substances for the treatment of immunological and inflammatory diseases. The present sequence is that the P2Y-like receptor variant encoding gene of the invention

Sequence 1014 BP; 258 A; 263 C; 189 G; 304 T; 8 U; 0 Other;

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XX	AAK98323;	
XX	AC	
DT	30-APR-2002	(first entry)
XX		Human purinergic-related G-protein coupled receptor (GPCR) cDNA sequence.
DE		
XX		Human; chromosome 13; purinergic GPCR; G-protein coupled receptor;
KW		signal transduction; human protease; GPCR disorder; gene therapy;
KW		transgenic animal; gene; ss.
KW		

1.2.1	GCAATTCCTCCGGAAATTGAGCTTCTGAACTTGTGAACTGAGATTTACATTCATTC	180
18.1	AAAATGAGACCTTCTGGAAAGCAGCACCATCTTATGCTGAACTTGTGAGCTGCTG	240
18.1		
24.1	CTGTATCGACCAGCCTCCCTTCTGATTCATCTATGCCAGTGAGGAACACTGATC	300
24.1		
	CTGTATCTGACCAGCTCCCTTCTGATTCATCTATGCCAGTGAGGAACACTGATC	300

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4100-US015957

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CORP.

2

LAVENIKA,

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s-Protein could be
exized by ab-

receptor p

4

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64pp; Eng 11

specifically class

11

chromosome 13) encodes a purinergic-related G-protein coupled receptor (GPCR) of the invention. GPCRs constitute a major class of proteins responsible for signal transduction within a cell. Upon binding of a ligand to the extracellular portion of a GPCR, a signal is transduced resulting in a biological or physiological change within the cell. The purinergic GPCRs can be divided into five families, family I contains the purinergic GPCRs (e.g. the P2Y receptors). P2Y receptors are characterised by their selective responsiveness towards ATP and its analogues, some also respond to UTP. The invention comprises a human G-protein coupled receptor protein and encoding nucleic acids. The GPCR protein and nucleic acids of the invention are useful in the treatment of a disease or condition mediated by a human protease. The GPCR protein of the invention is useful for: the development/identification of therapeutic proteins; assays designed to quantitatively determine levels of the protein in biological fluids; identifying compounds which modulate the activity of the GPCR, or the interaction of the GPCR and a molecule with which it normally interacts; and treating a disorder characterised by an absence of, or inappropriate expression of the GPCR protein. The GPCR nucleic acids of the invention are useful in diagnostic assays to identify changes in the GPCR nucleic acid that lead to pathology; controlling GPCR expression, and in gene therapy to treat patients with aberrant GPCR gene expression. The GPCR nucleic acids can also be used in the production of transgenic animals.

Sequence 1014 BP; 258 A; 263 C; 189 G; 304 T; 0 U; 0 Other;

Query Match 99.8%; Score 1012.4; DB 6; Length 1014;
Best Local Similarity 99.9%; Pred. No. 5.BE-289;
Matches 1013; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 1 ATGATGAGCCACTAGACTATTACCAATGCTCTGATTCCCGATTATGCCGTCT 60
Db 1 ATGATGAGCCACTAGACTATTACCAATGCTCTGATTCCCGATTATGCCGTCT 60
Qy 61 TTGGGAAATTGCACTGAAACATCCACTGAAACATCCCACTGAACTGAACTGAACTT 120
Db 61 TTGGGAAATTGCACTGAAACATCCCACTGAAACATCCCACTGAACTGAACTGAACTT 120
Qy 121 GGCATTATCCTCTGTGGATTTCCAGGCAATGCGATGCTGATGATGATGATGAT 180
Db 121 GGCATTATCCTCTGTGGATTTCCAGGCAATGCGATGCTGATGATGATGATGAT 180
Qy 181 AAAATGAGACCTTGGAGAGGACCATATTATGCTGAACCTGGCTGACAGATCTG 240
Db 181 AAAATGAGACCTTGGAGAGGACCATATTATGCTGAACCTGGCTGACAGATCTG 240
Qy 241 CTGATCTGACCAAGCTCCCTTCTGATTCACCTACTATCCAGTGCGGAAACTGGATC 300
Db 241 CTGATCTGACCAAGCTCCCTTCTGATTCACCTACTATCCAGTGCGGAAACTGGATC 300
Qy 301 TTGGGAAATTGCACTGAACTTATCCGCTTCAACCTGTTAGCTGAGC 360
Db 301 TTGGGAAATTGCACTGAACTTATCCGCTTCAACCTGTTAGCTGAGC 360
Qy 361 ATCCCTCTCCATGCAAAACTGATCTCCGTTAGCTGAGCTTACCCATGAGC 420
Db 361 ATCCCTCTCCATGCAAAACTGATCTCCGTTAGCTGAGCTTACCCATGAGC 420
Qy 421 TGCTTTCATGCAAAACTGATCTCCGTTAGCTGAGCTTACCCATGAGC 480
Db 421 TGCTTTCATGCAAAACTGATCTCCGTTAGCTGAGCTTACCCATGAGC 480
Qy 481 TAATCTGAGCTGAACTTCTGCTGATTCCTGATGACCTTCTGATCATACCAACG 540
Db 481 TAATCTGAGCTGAACTTCTGCTGATTCCTGATGACCTTCTGATCATACCAACG 540
Qy 541 TAGCCCTGTCGACCTCACCAAGTGGATCAACTTAAGTGCTGAGCTAACCCTA 600
Db 541 TAGCCCTGTCGACCTCACCAAGTGGATCAACTTAAGTGCTGAGCTAACCCTA 600
Qy 601 ATTTCGAACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
Db 601 ATTTCGAACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660

RESULT 9

AFK113B1

AC ABK113B1;

DR 05-JUN-2002 (first entry)

DE Human DNA encoding P2Y1-like G protein-coupled receptor.

XX Human; ds; Gene; P2Y1-like G protein-coupled receptor; GPCR; infection;

XX pain; cancer; anorexia; bulimia; asthma; hypotension;

XX central nervous system disease; acute heart failure; hypertension;

XX urinary retention; osteoporosis; diabetes; angina pectoris;

XX myocardial infarction; ulcer; inflammation; allergy; multiple sclerosis;

XX benign prostatic hypertrophy; psychosis; neurological disorder;

XX Parkinson's disease; anxiety; schizophrenia; CNS disorder;

XX dementia; severe mental retardation; Huntington's disease;

XX Tourette's syndrome.

OS Homo sapiens.

PH Location/Qualifiers

CD5 1..1014

FT / *tag= a

/product= "P2Y1-like GPCR"

W0200214511-A2.

XX

PR 21-FEB-2002.

XX 10-AUG-2001; 2000US-0224969P.

(PARB) BAYER AG.

XX Ramakrishnan S;

PI WPI: 2002-257607/30.

DR P-PSDB; AAU7600

XX Novel human P2Y1-like G protein-coupled receptor polypeptide which can be regulated for treating infection, pain, cancer, diabetes, anorexia, asthma, hypertension, neurological disorder and dyskinesia.

PS Claim 1; Fig 5; 118pp; English.

XX The invention relates to a purified human P2Y1-like G protein-coupled
 CC receptor (GPCR) polypeptide and the nucleic acids encoding it (including
 CC 5' and 3' sequences, promoters, fragments, variants, or a sequence
 CC encoding a protein at least 50% identical to the GPCR). Also included are
 CC an expression vector comprising the nucleic acid, a host cell containing
 CC the vector and the identification of modulators of the GPCR especially
 CC those that reduce the activity of the GPCR. The nucleic acid is useful
 CC for detecting a polynucleotide encoding the GPCR in a biological sample.
 CC The GPCR and nucleic acid are useful for screening for agents which
 CC decrease the activity of the GPCR and for modulators of the GPCR. The
 CC modulator or agent useful for modulating the activity of P2Y1-like G
 CC protein-coupled receptor in a disease such as bacterial, fungal,
 CC protozoan, and viral infection; pain, cancer, anorexia, bulimia, asthma,
 CC central nervous system (CNS) disease, acute heart failure, hypertension,
 CC hypertension, urinary retention, osteoporosis, diabetes, angina pectoris,
 CC myocardial infarction, ulcer, inflammation, allergy, multiple sclerosis,
 CC benign prostatic hyperplasia, psychological disorders,
 CC dyskinesias, HIV virus infection (human immunodeficiency virus), CNS
 CC disorders such as Parkinson's disease, anxiety, schizophrenia, manic
 CC depression, delirium, dementia, severe mental retardation, Huntington's
 CC disease and Tourette's syndrome. The present sequence encodes the P2Y1-
 CC like GPCR of the invention.

XX Sequence 1014 BP; 258 A; 263 C; 189 G; 304 T; 0 U; 0 Other;

SQ 99.0% Score 1012.4; DB 6; Length 1014;

Query Match Best Local Similarity 99.9%; Pred. No. 5.8e-289; Matches 1013; Conservatism 0; Mismatches 1; Indels 0; Gaps 0;

Db	601 ATTTGACTGCACTACTTCTGCCTCCCTGGTAGTGTGACCTTGCTATACCG 660	Db	661 ATTATCCACACTCTGACCCATGGACTGAAACTAACGTCAGCTGCCCTAAGGAAAGCAGCA 720
Qy	661 ATTATCCACACTCTGACCCATGGACTGAAACTAACGTCAGCTGCCCTAAGGAAAGCAGCA 720	Db	661 ATTATCCACACTCTGACCCATGGACTGAAACTAACGTCAGCTGCCCTAAGGAAAGCAGCA 720
Db	721 AGGCTTACCATTTCTCTACTACCTCCCTCATTTACGATGTTTACCCCTCCATATCTTG 780	Qy	721 AGGCTTACCATTTCTCTACTACCTCCCTCATTTACGATGTTTACCCCTCCATATCTTG 780
Db	721 AGGCTTACCATTTCTCTACTACCTCCCTCATTTACGATGTTTACCCCTCCATATCTTG 780	Db	721 AGGCTTACCATTTCTCTACTACCTCCCTCATTTACGATGTTTACCCCTCCATATCTTG 780
Qy	781 AGGGTATTGGATGGATGAATCTCGCTGCGTTCATCTAGTGTGCAATGAGAAAGGAGTC 840	Qy	781 AGGGTATTGGATGGATGAATCTCGCTGCGTTCATCTAGTGTGCAATGAGAAAGGAGTC 840
Db	781 AGGGTATTGGATGGATGAATCTCGCTGCGTTCATCTAGTGTGCAATGAGAAAGGAGTC 840	Db	781 AGGGTATTGGATGGATGAATCTCGCTGCGTTCATCTAGTGTGCAATGAGAAAGGAGTC 840
Qy	841 CATGAGCTTACATCTTCTGACCCATAGCTGCTGACCTTGTGACACTTGTGACCTGTTA 900	Qy	841 CATGAGCTTACATCTTCTGACCCATAGCTGCTGACACTTGTGACCTTGTGACCTGTTA 900
Db	841 CATGAGCTTACATCTTCTGACCCATAGCTGCTGACACTTGTGACCTTGTGACCTGTTA 900	Db	841 CATGAGCTTACATCTTCTGACCCATAGCTGCTGACACTTGTGACCTTGTGACCTGTTA 900
Qy	901 CTATATCTGGCTGTCAGCGACACTTCAGTAGGGCTGCTGCTGACAGTGTGAGATGCAA 960	Qy	901 CTATATCTGGCTGTCAGCGACACTTCAGTAGGGCTGCTGCTGACAGTGTGAGATGCAA 960
Db	901 CTATATCTGGCTGTCAGCGACACTTCAGGGCTGCTGCTGACAGTGTGAGATGCAA 960	Db	901 CTATATCTGGCTGTCAGCGACACTTCAGGGCTGCTGCTGACAGTGTGAGATGCAA 960
Qy	961 CTAAAGCGGAACTCTGCAAGCAGAAATTAGTTACTAAAGAACCCCTGA 1014	Qy	961 CTAAAGCGGAACTCTGCAAGCAGAAATTAGTTACTAAAGAACCCCTGA 1014
Db	961 GTRAGCGGAACTCTGCAAGCAGAAATTAGTTACTAAAGAACCCCTGA 1014	Db	961 GTRAGCGGAACTCTGCAAGCAGAAATTAGTTACTAAAGAACCCCTGA 1014

RESULT 10

ABZ42876

ID ABZ42876 standard; DNA; 1014 BP.

XX AC ABZ42876;

DT 06 MAR 2003 (first entry)

XX Human GPCR polynucleotide SEQ ID NO 13.

XX DE WC002016548-A2

XX KW Human; GPCR; G protein coupled receptor; signal transduction; olfactory;

XX KW drug development; gustatory; taste; fragrance; gene; ds.

XX Homo sapiens

XX CS

XX PN

XX PD

XX 28-FEB-2002.

XX XX (NISTC-) JAPAN SCI & TECHNOLOGY CORP.

XX PP 30-JUL-2001; 2001WC-1B001446.

XX PR 04-AUG-2000; 20000JP-00237818.

XX PR 13-FEB-2001; 2001JP-00034434.

XX PA XX Haga, T., Takeda, S., Mitaku, S.

XX DR WPI: 2002-304118/34.

XX DR P-PSDB; ABP95602.

XX PS XX Database global search for G protein-coupled receptors, proteins and

PT PT encoded genes for studying in vivo signal transduction mechanism and

PT PT identifying targets for drug development.

XX XX Claim 9; SEQ ID NO 13; 97pp + Sequence Listing; Japanese.

XX The invention relates to a method for screening G protein-coupled

CC receptor (GPCR) genes (ABZ42876-ABZ4316) and GPCR proteins

CC ABP95942) by extracting open-reading frames containing 6-8 transmembrane

CC domains with 250-1000 amino acid residues to give a gene homologous with

CC a known GPCR gene. The receptor proteins and encoded genes are useful for

CC studying in vivo signal transduction mechanism and identifying targets

CC for drug development e.g. based on olfactory and gustatory receptors in

CC form of agonists and antagonists by screening intrinsic and extrinsic

CC ligands as bitter taste inhibitors, taste enhancers and fragrance

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